

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

REPORT OF EXAMINATION FOR CHANGE TO GROUNDWATER CERTIFICATE
TO APPROPRIATE PUBLIC WATERS OF THE STATE OF WASHINGTON

- ☐ Surface Water (Issued in accordance with the provisions of Chapter 117, Laws of Washington for 1917, and amendments thereto, and the rules and regulations of the Department of Ecology.)
- ☒ Ground Water (Issued in accordance with the provisions of Chapter 263, Laws of Washington for 1945, and amendments thereto, and the rules and regulations of the Department of Ecology.)

PRIORITY DATE February 21, 1952	APPLICATION NUMBER 2351	PERMIT NUMBER 2168	CERTIFICATE NUMBER 1300
NAME Marvin Enfield			
ADDRESS (STREET) 1064 Birch Bay Road	(CITY) Lynden	(STATE) Washington	(ZIP CODE) 98265

PUBLIC WATERS TO BE APPROPRIATED		
SOURCE Infiltration trench/pond		
TRIBUTARY OF (IF SURFACE WATERS)		
MAXIMUM CUBIC FEET PER SECOND	MAXIMUM GALLONS PER MINUTE 320	MAXIMUM ACRE FEET PER YEAR 105
QUANTITY, TYPE OF USE, PERIOD OF USE Irrigation during irrigation season		

LOCATION OF DIVERSION/WITHDRAWAL					
APPROXIMATE LOCATION OF DIVERSION--WITHDRAWAL					
LOCATED WITHIN (SMALLEST LEGAL SUBDIVISION) SE ¼ SE ¼	SECTION 22	TOWNSHIP N. 40	RANGE, (E. OR W.) W.M. 2 E	W.R.I.A. 1	COUNTY Whatcom

RECORDED PLATTED PROPERTY		
LOT	BLOCK	OF (GIVE NAME OF PLAT OR ADDITION)

LEGAL DESCRIPTION OF PROPERTY ON WHICH WATER IS TO BE USED

- A) W ½ SE ¼ except one acre in the SE corner southerly of creek in Section 22, Township 40 N, Range 2 E.
- B) SE ¼ NW ¼ also beginning NW corner of SE ¼ NW ¼ of Section 22, Township 40 N, Range 2E; thence North 44 feet; thence East 1320 feet more or less to a point on the East line of NE corner of SE ¼ NW ¼; thence South 38 feet to the Northeast corner of the SE ¼ NW ¼; thence West 1320 feet more or less to the point of beginning.
- C) S ½ S ½ NW ¼ SW ¼ in Section 22, Township 40 N, Range 2 E, except county road # 367.
- D) N ½ S ½ NW ¼ SW ¼ Section 22, Township 40 N, Range 2 E, except county road # 367.
- E) S ½ N ½ NW ¼ SW ¼ Section 22, Township 40 N, Range 2 E, except county road # 367.
- F) The north 30 acres of the NW ¼ SW ¼ and the East 20 feet of the SE ¼ SE ¼ NE ¼ SW ¼ and the East 20 feet of the E ½ SE ¼ SW ¼ all in Section 22, Township 40 N, Range 2 E.
- G) North 66 feet of the SE ¼ and all of the NE ¼ SE ¼ in Section 21, Township 40 N, Range 2 E, except the north 22 acres of the NE ¼ SE ¼ and except beginning at the SE corner of the north 20 acres of NE ¼ SE ¼ and except beginning at the SE corner of the north 20 acres of the NE ¼ SE ¼; thence west 297 feet; thence south 110 feet; thence East 297 feet to the section line; thence North 110 feet to the point of beginning except roads and except commencing at the SE ¼ of the north 20 acres of the NE ¼ SE ¼, thence south 230 feet to the true point of beginning; thence west 317 feet; thence South 206 feet; thence 317 feet to the East line of said section; thence North 206 feet to the true point of beginning, less roads all in Section 21, Township 40 N, Range 2 E.
- H) Lot 1, "Mayberry Short Plat" according to the plat thereof, recorded in book 3 of plats, page 149, records of Whatcom County, Washington.
- I) S ½ SE ¼ SE ¼ except the east 520 feet of the south 500 feet thereof, and except Birch Bay Lynden Road along the South line thereof and Bob Hall road along the East line thereof all in Section 21, Township 40 N, Range 2 E. Also, commencing at a point 665 feet North of the SE corner of Section 21, running thence North 595 feet, more or less to a point of 4 rods South of the NE corner of SE ¼; thence West 80 rods; thence South 595 feet, more or less, to a point 665 feet North of the South line of section 21; thence East 80 rods to the point of beginning, except right of way for Bob Hall road lying along the East line thereof; except that portion of the two parcels listed as follows: commencing on the North line of Bob Hall road 30 feet South of the NE ¼ of the second parcel listed above; thence continuing South along the West line of Bob Hall road 733 feet; thence West along the South line of the first parcel listed above 299.5 feet; thence North parallel to the West line of Bob Hall Road 728 feet; thence east 299.5 feet to the point of beginning all within Section 21, Township 40 N, Range 2 E.
- J) N ½ N ½ NW ¼ SW ¼ of Section 22, Township 40 N, Range 2 E.
- K) The East 130 feet of the South 290 feet of the N ½ SW ¼ SW ¼ of Section 22, Township 40 N, Range 2 E. Also the W ½ SE ¼ SW ¼ of Section 22, Township 40 N, Range 2 E, except the West 100 feet of the North 310 feet thereof, also except the West 400 feet of the South 300 feet, less roads. Also the S ½ S ½ of the NE ¼ SW ¼ of Section 22, Township 40 N, Range 2 E; except the East 20 feet thereof, also, the E ½ SE ¼ SW ¼ of Section 22, Township 40 N, Range 2 E; except the East 20 feet and except the East 427 feet of the South 22 ½ rods thereof.

DESCRIPTION OF PROPOSED WORKS

The applicant, Marvin Enfield, is requesting to expand the acres irrigated under six water rights from a total of 236 acres to 300 acres. The irrigation system has six water rights; four groundwater rights (G1-00502C, G1-21213C, G1-20922C and GWC 1300) and two surface water rights (SWC 9177 and SWC 1384). The subject water right, GWC 1300, is an infiltration trench, approximately 9 feet deep, 25 feet wide and 300 foot long. The trench feeds into a larger irrigation network across the farm, which comprised of shallow wells, infiltration trenches and water diversions from surface water. Water from these sources is pumped into pumping stations throughout the farm where the water is filtered before it is delivered to the irrigation system. The applicant uses drip irrigation and irrigation pipes which are either located below ground for raspberry plants or above the plant for blueberries.

DEVELOPMENT SCHEDULE

BEGIN PROJECT BY THIS DATE: Completed	COMPLETE PROJECT BY THIS DATE: Completed	WATER PUT TO FULL USE BY THIS DATE: <i>Work with applicant for this date</i>
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REPORT

BACKGROUND INFORMATION

Marvin Enfield farms approximately 500 acres of raspberries and 120 acres of blueberries in Whatcom County near Lynden, Washington. The farms are irrigated by various groundwater and surface water sources and are authorized under several different water rights. The applicant submitted 9 change applications in February and March 1993 to add irrigated acres authorized under water rights in two different areas of the Enfield farms. Six water right change applications (G1-00502C, G1-21213C, G1-20922C, GWC 1300, SWC 9177 and SWC 1384) were submitted in the area surrounding the Enfield Farm office and processing plant and three other water right change applications (GWC 1766, 6931 and 1414) were submitted to the area surrounding Pole Road and Bartlett Road south of the farm headquarters. The changes were requested as the applicant had just begun the process of converting acres to drip irrigation. With the gains in efficiency and reductions in water diversion or withdrawal, Enfield believed that he could irrigated the additional acres with the convserved water.

Mr. Enfield is applying to expand the place of use to irrigate approximately 280/300 acres surrounding the Enfield farm offices and processing facility. The subject application, GWC 1300, requests a change in the place of use. The withdrawal authorized under GWC 1300 is an infiltration trench with a limit of 320gpm and 105 acre-feet per year and was intended to irrigate 70 acres. The trench was dug in August 1952 to a depth of 9 feet, and is approximately 25 feet wide and 300 feet long. The water is pumped directly from the pond to a pumping house where the water is filtered to remove debris before being moved through the irrigation network. In addition to this water source, the irrigation system consists of six water rights in total with two surface water diversions (SWC 9177 and SWC 1384) and five groundwater wells or infiltration trenches (G1-21213C, G1-20422C, GWC 1300, G1-00502C). The applicant irrigates his crops by using a drip irrigation system. The system has 5 zones which are associated with each water source. The zones and their associated water rights are listed in the historic water use section of this report. GWC 1300 serves the Home Zone and withdrawals at a rate of approximately 265 gpm. The drip system is buried underground and saturates the root bulbs directly for raspberry fields; for blueberry fields, the piping is above ground to water the plants from overhead. The typical irrigation season lasts from mid April to October and the amount of watering and duration depend upon several factors such as weather and soil conditions.

Prior to drip irrigation (complete harvest years of 1987-1991), Enfield Farms used 5 Big Gun flexible reel sprinklers to irrigate the berries. During this period, Enfield also grew 20-30 acres of strawberries in addition to raspberries and blueberries. The Big Gun sprinklers had a diversion rate of approximately 275-300 gpm. The sprinklers ran continuously during the irrigation season for each crop type.

Attributes of the Original Certificate

Name on Certificate:	L.E. and W.E. Maberry
Priority Date:	February 21, 1952
Instantaneous Quantity:	320 gallons per minute (gpm)
Annual Quantity:	105 acre-feet per year (afy)
Point of Withdrawal:	SW¼ SE ¼ of Section 22, Township 40 North, Range 2 East
Purpose of Use:	Irrigation
Period of Use:	Irrigation Season
Place of Use:	W ½ of SE ¼, excluding one acre in SE corner Southerly of creek, less road, Section 22, Township 40 N, Range 2 E.

Proposed Change

Name of Applicant:	Marvin Enfield
Date of Application for Change:	January 25, 1993
Purpose of Use:	Irrigation
Period of Use:	Irrigation season
Place of Use:	See page 1
Notice of Publication:	Lynden Tribune, May 12, 1993 and May 19, 1993.
Protests:	Lummi Nation

INVESTIGATION

In considering this application, my investigation included, but was not limited to research and/or review of:

- The State Water Code
- Existing water rights on file for Marvin Enfield
- Records of other water rights in the vicinity
- Notes from site visit on May 9, 2002
- Topographic and local area maps

State Water Code

Chapters 90.03 and 90.44 RCW authorize the appropriation of public water for beneficial use and describe the process for obtaining water rights including the process to amend or change existing rights. Laws specifically governing the water right permitting process are RCW

Existing Rights for Marvin Enfield

Marvin Enfield holds a number of water right certificates, claims and applications. The following table summarizes the changes to existing water rights which Enfield owns which are currently being processed by the Department of Ecology.

Table 1. Enfield Farms Water Right Changes

Bartlett & Pole Road Area Farm					
Certificate	Priority Date	Qi	Qa	Acres	Source Location
GWC 6931-A	1/29/1969	120	51	34	Well-W ½ W ½ SE ¼ Sec. 6, T39N, R3E
GWC 1414-A	4/14/1952	140	15	10	Well-N ½ SW ¼ Sec. 6, T39N, R3E
GWC 1766	4/17/1952	150	30	20	Well-SW ¼ SE ¼ Sec. 6, T39N, R3E
Total		410	96	64	
Additional Acres				76	
Birch Bay Road Farms					
Certificate	Priority Date	Qi	Qa	Acres	Source Location
SWC 9177C	4/2/1962	0.20 cfs	40	20	Unnamed Slough- SE ¼ NE ¼ Sec. 22, T40N, R 2E
SWC 1384C	3/28/1940	0.67 cfs	124	62	Bertrand Creek- 200' S & 200'E of NE corner of SW ¼ SE ¼ Sec. 22
GWC 1300	2/21/1952	320	105	70	Infiltration trench-10'N & 940' E of S ¼ corner Sec. 22, T22N, R2E
G1-00502C	4/28/1971	250	67	50	Well—NW ¼ SW ¼ Sec. 22, T40N, R 2E
G1-21213C	2/1/1974	180	9	18	Infiltration trench- NE ¼ SE ¼ Sec. 21, T.40, R 2E
G1-20922C	9/19/1973	100	29	16	Well—S ½ SE ¼ SE ¼ Sec. 21, T40N, R 2E
Total		1240.5 (gpm)	374	236	
Additional Acres				280	

In addition to the existing water rights, Enfield also has submitted 14 applications for new water rights and 2 claims to vested water rights. These documents are summarized below:

Table 2. Enfield Farms Water Right Applications and Claims to Vested Rights

Application/Claim Number	Priority Date	Qi	Qa	Number of Acres	Purpose
G1-26903A	1/25/1993	270			DS CI
G1-27035A	4/06/1993	5			DS
G1-26900A	1/25/1993	10			DM
G1-26906A	1/25/1993	300		300	IR
G1-301118CL	1938	200	80	20	
G1-26887A	1/25/1993	20			DM
G1-26901A	1/25/1993	20			DS
G1-26902A	1/25/1993	20			DS
G1-27034A	4/6/1993	100		300	IR
G1-301104CL	1925	100	25	5	IR DG OT
S1-26889A	1/25/1993	.670		280	IR
S1-27081A	4/22/1993	.750		280	IR
S1-27082A	4/22/1993	.300		280	IR
S1-26905A	1/25/1993	4.47		70	IR
G1-27843A	9/18/1997	150		120	IR
G1-27844A	9/18/1997	100		120	IR
G1-27061A	4/02/1993	250		107	ST IR

Other Water Rights in the Vicinity

Existing Permits and Certificates

Nine water right permits and certificates exist within a ½ mile radius of the Enfield wells and farm. The following table lists the water rights and the attributes of the rights.

Table 3. Water Right Permits and Certificates near GWC 1300

Water Right	Name	Purpose	Priority Date	Qi	Qa	Location
G1-05902C	S. Brockmeyer	DS, IR	4/11/1961	160	55.6	NW ¼ NW ¼ T 40N, R 2 E, Sec. 22
SWC 5726-A	W.E. Holt	IR	6/15/1953	.18		SE ¼ NE ¼ T 40N, R 2 E, Sec. 22
GWC 6517-A	GT McClelland	IR	5/17/1967	270	54	N ½ SW ¼ NW ¼ T 40N, R 2 E, Sec. 22
G1-21356C	Juan Perez	IR, DS	4/1/1974	50	13	S ½ SW ¼ NW ¼ T 40N, R 2 E, Sec. 22
GWC 1234	R F Rawls	IR	5/23/1951	75	15	SW ¼ SW ¼ SW ¼ T 40N, R 2 E, Sec. 22
GWC 4723	Shady Nook Farms	IR	3/28/1963	380	120	NW ¼ NE ¼ T 40N, R 2 E, Sec. 22

SWC 2109	Sheets	IR	9/2/1941	.700		W ½ NE ¼ T 40N, R 2 E, Sec. 22
SWC 4435	JB Wakefield	IR	9/8/1950	.100		SW ¼ NW ¼ T 40N, R 2 E, Sec. 22
SWC 6952	Bedlington Farms	IR	5/12/1993	1.1		NW ¼ NE ¼ T 40N, R 2 E, Sec. 27
SWC 4472	Bedlington Farms	IR	3/7/1946	1.1		NW ¼ NE ¼ T 40N, R 2 E, Sec. 27
G1-00686C	Century Water Assn	DM	6/2/1971	30	12	NW ¼ NW ¼ T 40N, R 2 E, Sec. 27
SWC 4376	R. Dawson	IR	8/26/1946	.100		NW ¼ T 40N, R 2 E, Sec. 27
G1-20139C	Charles Thompson	IR	5/24/1972	250	29	E ½ NW ¼ T 40N, R 2 E, Sec. 22

Claims

28 claims to vested water rights were found in a ½ mile radius from the Enfield farm. These claims are for both groundwater and surface water rights.

Exempt Wells

In addition to certificated, permitted and claims to water rights, there are several exempt wells in a ½ radius from GWC 1300. Table 4 lists the owner and location of these wells.

Table 4. Exempt Wells with a ½ mile radius of GWC 1300

Name	Location
Doug Van Beek	SE ¼ SE ¼ T 40N R 2 E, Sec. 22
Enfield Farms	NW ¼ SE ¼ T 40N R 2E, Sec. 22
Jim & Debbie Brockmeyer	NE ¼ NW ¼ T 40N R 2E, Sec. 22
John Clark	SW ¼ SW ¼ T 40N R 2E, Sec. 22
Juan Perez	SW ¼ NW ¼ T 40N R 2E, Sec. 22
Leonard Luedke	NE ¼ NW ¼ T 40N R 2E, Sec. 22
Richard Franciso	SW ¼ SE ¼ T 40N R2E, Sec. 22
Sue Tenkley	NE ¼ SE ¼ T 40N, R 2E, Sec. 22

Site Visit

A site examination was made by Jacque Klug, permit writer and Buck Smith, unit supervisor with the Department of Ecology on May 9th 2002. During the visit we met with Marvin Enfield, President of Enfield Farms, and Mike Haveman, the Business Operations Manager of Enfield Farms. We toured the two surface water diversions and five groundwater withdrawals and observed how the sources were connected into the irrigation network. All of the wells, infiltration trenches and surface water diversions were operating and were located in the original point of diversion/withdrawal authorized by the water right. The infiltration trench permitted under the subject water right, GWC 1300, was dug to a depth of 9 feet and is approximately 25 feet wide and 300 feet long. The water is pumped directly from the trench to a pumping house adjacent to the trench, where the water is filtered and then moved through the irrigation network. Since the site visit was in early May and it had been a wet spring, the sprinklers were not operating, but it was evident that the system was in working order and the crops would be irrigated when conditions required irrigation.

Topographic and Local Area Maps

USGS Topographical maps and local area maps of the region were used to aid the investigation of the proposed changes. In addition, GIS Parcel Maps of Whatcom County were used to plot the existing points of diversion and the additional acreage requested in the expanded place of use.

Relinquishment and/or Abandonment Evaluation

Aerial photos were obtained from 1966, 1976, 1991 and 1998 of the Enfield Farms. While the photo record is not complete, it was evident from the photos that the land had been in agriculture production at least since 1966. In all photos, crop rows can be distinctly made out on the land on which the water rights are appurtenant. In addition, the rows are a darker gray on the black and white photos (1966, 1976 and 1998) than the white strips in between, indicating that the row crops had been irrigated. For the color photo (1976), the crop rows were a dark green color, indicating that the crops had been irrigated. In conclusion, there is no evidence to suggest that any portion of GWC 1300 has been forfeited or abandoned due to nonuse.

Historic Water Use

The amount of water available for a water right change is dependent upon prior perfection of the water right according to change provisions for both surface water and groundwater (RCW 90.03.380 and 90.44.100). When an applicant proposes to spread the use of perfected water to additional acres, such action, "...may be permitted if such change results in no increase in the annual consumptive quantity of water used under the water right." The statute defines the annual consumptive quantity as "the estimated or actual annual amount of water diverted pursuant to the water right, reduced by the estimated annual amount of return flows, averaged over the two years of greatest use within the most recent five-year period of continuous beneficial use of the water right" (RCW 90.03.380(1)). To summarize, spreading to additional acres cannot result in additional water being used or lost to the environment by using a different conveyance method. Calculating the annual consumptive quantity is the method to assess whether the new larger project would result in an enlargement of the water right.

Ideally, an applicant should apply to the Department of Ecology for approval before beginning a project to spread irrigation water to additional acres. However, Enfield Farms applied for the spreading change after the spreading action occurred. Given the lengthy backlog of water right applications and the increasing need to become more competitive in the agriculture sector, it is understandable why Enfield Farms did not wait for approval of the change before spreading. Yet, the action of proceeding on the change by the applicant complicates assessment of the annual consumptive quantity of water used by the new project. If only the last five years were examined, then the average of the highest two years would not result in the enough water to spread. However, converting to a more efficient irrigation method, drip irrigation did enable Enfield Farms to use less water and add irrigated acres. To determine if the conversion to drip did result in no increase in the annual consumptive quantity, it is necessary to examine water use before the conversion to drip irrigation and then compare it with water use after the project was completed.

Enfield Farms currently does not have any metering devices on any of their water diversions. Consequently, instantaneous and annual quantities of water use had to be estimated before the project was completed, and after the conversion to drip irrigation. Several different estimation methods were used to try to obtain the most accurate estimation as possible.

Water Use Estimates

In absence of metering data, the applicant estimated yearly water use for the last five years of operating with drip irrigation and provided an estimate of water use per year for the last five years when they irrigated with the Big Gun flexible hose sprinkler. These two sets of yearly water use provide an estimation of the conservation of water which occurred when the applicant switched to drip irrigation. The following two tables list the yearly water use estimations for both irrigation methods.

Drip Irrigation

Year	Zone	Crop Type	Qi	Qi (perfected)	Qa	Qa (used)	Acres Authorized in certificates	Acres Irrigated
2002	GWC 1300	Raspberries	320	265	105	89.8	67	76
2001	GWC 1300	Raspberries	320	265	105	76.9	67	76
2000	GWC 1300	Raspberries	320	265	105	68.8	67	76
1999	GWC 1300	Raspberries	320	265	105	81.7	67	76
1998	GWC 1300	Raspberries	320	265	105	74.5	67	76

Big Gun Irrigation

Year	Zone	Crop Type	Qi	Qi (perfected)	Qa	Qa (used)	Acres Authorized in certificates	Acres Irrigated
2002	GWC 1300	Raspberries	320	300	105	89.8	67	76
2001	GWC 1300	Raspberries	320	300	105	76.9	67	76
2000	GWC 1300	Raspberries	320	300	105	68.8	67	76
1999	GWC 1300	Raspberries	320	300	105	81.7	67	76
1998	GWC 1300	Raspberries	320	300	105	74.5	67	76

FINDINGS

In accordance with state law, the following considerations must be addressed during the process of evaluating this change request:

- Will the change create an enhancement of the original right?
- Will the change cause impairment to other existing rights?
- Will the public interest be impaired?
- What are the protestants concerns?
- Is there potential for different impacts on the water source?

Potential for Enhancement

You must investigate the water right and make a tentative determination of the extent to which a water right actually exists (Forfeiture? Abandonment?) and is valid for change. The tentative determination shall consider the legal authority to have perfected a right, the means by which the right was originally established, the historical development and use of water, and the practices employed to divert, convey and use water. The tentative determination shall not recognize a water right in excess of the amount historically put to beneficial use in compliance with state water law and applicable rules. No water quantities shall be recognized beyond the amount necessary to accomplish the beneficial use employing reasonably efficient practices. Water use in excess of the quantities necessary using reasonably efficient practices constitutes water waste.

A water right or portion thereof that has not been previously put to beneficial use may not be changed. Exceptions can be considered with regard to changing the point of withdrawal or place of use authorized by a groundwater permit. You may request additional information beyond that required in the application to change. To ensure the receipt of accurate information, you may request a notarized affidavit attesting to historic water use.

The amount of water appropriated, either on an instantaneous basis or cumulatively during a period of use, cannot be increased through a water right change. The acreage authorized to be irrigated under a water right, as tentatively determined by the department is a limitation under the right to irrigate and may only be increased in accordance with RCW 90.03.380 (1). Policies and procedures relating to adding additional irrigated acres are contained in POL-1210 and PRO-1000.

Impairment of Other Rights

Any proposed change or aspect of a proposed change is subject to denial or conditioning if it would impair any other water right. To evaluate the potential for impairment to occur, a tentative determination of the extent and validity of the neighboring water rights must be made.

A change to a water right may not generally cause a reduction in return flow without a balancing reduction in the diverted or withdrawn water quantity. Any reduction in return flow may not impair another water right dependent upon that return flow or have an adverse effect to the receiving water source.

Public Interest

No detriment to the public interest could be identified during the investigation of this application for change.

Protests

This water right change was protested by the Lummi Indian Business Council in a letter dated March 18, 1993. In this letter they mention that the trench associated with GWC 1300 appears to be located in close proximity to Bertrand Creek, which is significant for fish production, instream flows, and water quality and that hydraulic continuity between the water source and creek will reduce stream flows further. The Lummi Nation also claims to have the most senior water rights in the Nooksack Basin.

Potential for Different Impacts on the Water Source

Discuss how the change request may create different impacts to the water source than those that previously existed. Will the new conveyance system impact wildlife? Change return flows? Are there different water requirements at the new place of use? Will the season or period of use also change? Consumptive vs. non-consumptive?

Beneficial Use (for change in purpose of use only)

According to RCW 90.54.020, _____ use is considered a beneficial use of water.

Season or Period of Use (use only when requested)

The department may authorize a change in the season of use of water if the following conditions apply (in addition to any other applicable public interest or impairment consideration for a change):

- 1. Altering the period of use is related to and necessary to effect another proposed change in the right (e.g. changing the purpose of use);*
- 2. The net effect on streamflows and instream values must be neutral or positive. A reduction in streamflows during part of the year may be allowed if it is offset by an increase in streamflows during another time of year provided that the overall net effect on instream resources is positive. Ecology will consult with the state Department of Fish and Wildlife and other fishery and habitat managers as appropriate for assistance in making determinations related to effects on water bodies.*
- 3. Mitigation of any impacts to existing rights or streamflows is the responsibility of the party requesting the change. Mitigation proposals should be provided in writing as part of the application. Mitigation proposals may also be received after impacts to existing rights or instream flows are identified. The department will consider reasonable and credible mitigation proposals in accordance with existing law.*

DISCUSSION

The discussion section should expand upon and/or describe how you developed your FINDINGS from your INVESTIGATION. Or, you may discuss administrative corrections and/or other corrective updates not directly associated with the change request, but are desirable to update and/or correct the water right record.

In addition, this discussion section should include the following when appropriate (use subheadings):

The applicant's proposals to mitigate adverse impacts (on other water rights, streamflows, the public interest, etc.),

Compliance (if necessary) with the State Environmental Policy Act (SEPA),

Water quality issues (TMDL, seawater intrusion, etc.),

Calculations used to determine the annual water requirements for each use related to the project.

RECOMMENDATIONS

I recommend the request for change to _____ be approved, subject to the provisions listed below:

Provisions to ensure that the water use continues to be exercised in quantities not greater than those historically perfected and reasonably necessary, without impairment of existing rights or detriment to the public interest may be placed upon any approval of a change. Provisions may include, as appropriate, metering requirements, limitations in season of use, instream flow protection requirements, limitations on the crops to be grown, or specifications for system design and/or operation. Commonly used provisions are as follows:

The amount of water granted is a maximum limit that shall not be exceeded and the water user shall be entitled only to that amount of water within the specified limit that is beneficially used and required.

An approved measuring device shall be installed and maintained in accordance with RCW 90.03.360 and chapter 508-64 WAC. Meter readings shall be recorded at least monthly and shall be made available to the Department of Ecology upon request.

Installation and maintenance of an access port as described in Ground Water Bulletin No. 1 is required. An air-line and gauge may be installed in addition to the access port.

If it can be shown that the requested change has a detrimental effect on existing rights, it shall be the responsibility of the operator to mitigate for this impact and/or alter or cease withdrawal of water.

The applicant is advised that a certificate of water right will issue for only that quantity of water that has been withdrawn and applied to actual beneficial use. Such quantity applied to actual beneficial use shall not exceed the quantity specified in this report of exam and will be calculated based on the best information available to Ecology, including metering data and/or water duty analysis.

A certificate of water right will not be issued until a final investigation is made.

CONCLUSIONS

In accordance with chapter(s) 90.03 and 90.40 RCW, I conclude that _____ is in good standing and is eligible for change. I have determined that the change to _____ will not enlarge the original intent of the *permit, certificate, or claim* and the water use will be beneficial. Approval of this change request will not cause impairment of existing rights or be detrimental to the public interest. Based on these conclusions, this change request should be approved subject to existing rights and the above-indicated provisions *and a superseding permit should be issued.*

REPORT BY: _____

DATE: _____

DRAFT